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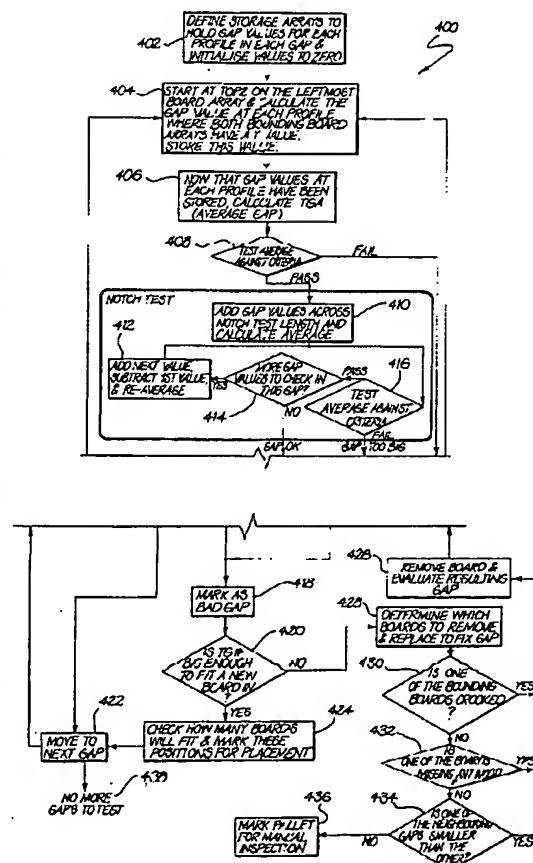
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| <p>(71) Applicant (<i>for all designated States except US</i>): BRAM-
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| <p>(72) Inventors; and</p> | |
| <p>(75) Inventors/Applicants (<i>for US only</i>): TOWNSEND, Steve</p> | |

[Continued on next page]

- (54) Title:** SOFTWARE AND METHODS FOR AUTOMATED PALLET INSPECTION AND REPAIR



(57) Abstract: An automated pallet inspection and repair apparatus comprises an inspection station and a repair station. The inspection station comprises a laser that illuminates a pallet, a camera that collects the reflected light and a computer system. The computer system analyses the output of the camera and acquires the pallet's geometry and topography. The design of the pallet is determined by the computer software. A decision to repair the pallet is made by comparing acquired pallet data against the design criteria. If the pallet needs repair, a recipe of repair steps is constructed by inspecting each of the pallet's elements. The recipe is transmitted to the automated repair station.



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